

**Amendment and Response**

Applicant: Daniel J. McGurran et al.

Serial No.: 09/872,532

Filed: June 1, 2001

Docket No.: M120.221.101 / 56763US002

Title: COLOR STABLE PIGMENTED POLYMERIC FILMS HAVING DYES FOR COLOR ADJUSTMENT

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**REMARKS**

This is responsive to the Non-Final Office Action mailed September 7, 2006. In that Office Action, claims 26 and 27 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Claims 1, 2, 10, 11, 13-19, and 21-27 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 1, 2, 10, 11, 13-19, and 21-27 were rejected under 35 U.S.C. §103(a) as being unpatentable over Enniss et al., U.S. Publication No. 2006/0003158 ("Enniss '158 Publication") or Enniss et al., U.S. Patent No. 6,440,551 ("Enniss '551 Patent") alone or in view of Oliver et al., U.S. Patent No. 4,634,637 ("Oliver") or Marks et al., U.S. Patent No. 3,298,959 ("Marks").

With this Response, claims 1, 14, 26, and 27 have been amended. Claims 1, 2, 10, 11, 13-19, and 21-27 remain pending in the application and are presented for reconsideration and allowance.

**35 U.S.C. §112 Rejections**

Claims 26 and 27 have been amended to recite a polyester-containing polymer material having a casting thickness of between 0.3 and 3 mm. Support for this language is found, for example, at page 6, lines 28-29. With this clarification, it is respectfully submitted that the rejection under 35 U.S.C. §112, first paragraph, has been traversed.

Each of independent claims 1, 14, 26, and 27 have been amended to recite that the claimed optical body (claims 1 and 14) or window film (claims 26 and 27) exhibits a transmission of light, within a wavelength band of 400 - 700 nm, of from 5% to 90%. Support for this language is found, for example, at page 5, lines 7-10. It is respectfully submitted that this amendment addresses the concerns listed in Paragraph 8 of the current Office Action, and provides clear notice as to what would infringe the claim. As such, it is respectfully submitted that the rejections under 35 U.S.C. §112, second paragraph, have been traversed.

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**35 U.S.C. §103 Rejections**

Aspects of the present application relate to adjusting the color of a pigmented polymeric film. For example, claim 1 recites a particulate pigment dispersed within a thermoplastic polymer material; added to this pigmented polymer material is at least one dye that adjusts the transmitted color otherwise imparted by the pigmented polymer material to a substantially neutral gray. Enniss '158 Publication and Enniss '551 Patent (collectively referred to herein as "Enniss") are in direct opposition. Namely, Enniss starts with a dyed film layer, and adds a pigmented adhesive in creating a visually additive effect. *Enniss*, Abstract. That is to say, the present application, as embodied for example by claim 1, adds a dye to a pigmented polymer, whereas Enniss adds a pigment to a dyed film. As a point of reference, Enniss represents the then-conventional belief that a colored film with minimal hue and haze could only be formed as a dyed film. As admitted by Enniss, dyed films are not light-stable. The present application overcomes this problem by providing a viable, pigmented film subsequently adjusted to a desired color via a dye additive.

Given the above diametrically opposed purposes of claim 1 as compared to Enniss, it is respectfully submitted that Enniss does not render claim 1 obvious. In particular, nothing in Enniss teaches or suggests adjusting the transmitted color associated with a pigmented polymer using a dye. Thus, for example, Enniss does not teach or suggest adding a dye in an amount sufficient to adjust the transmitted color associated with a pigmented polymer to a substantially neutral gray. One of skill upon reviewing Enniss would understand only to add a pigment-laden adhesive to a dyed film. This understanding does not teach the limitations of claim 1. As such, it is respectfully submitted that claim 1 is allowable over the cited references.

Claims 2, 10, 11, 13, 21, 22, 24, and 25 depend from claim 1 and thus, for at least the above reasons, are also allowable over the cited art. In addition, claim 13 recites that the dye adjusts the transmitted color of the optical body by no more than 15 units of a\* and by no more than 15 units of b\*. In contrast, because Enniss starts with a dyed film, the dye associated with this film inherently adjusts a transmitted color by more than 15 units a\* and/or more than 15 units of b\*. For example, Example 1 of Enniss describes applying a pigmented coating to a dyed

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film. The pigmented coating had an  $a^*$  value of 0.84 and a  $b^*$  value of 9.25. The resultant, coated film exhibited an  $a^*$  value of -3.96 and a  $b^*$  value of -4.9. Inherently, then, the initial, dyed film exhibited a  $b^*$  value of 15.15. This, in turn, means that the dye “adjusted” the color of the base film by 15.15 units of  $b^*$ . Thus, it is respectfully submitted that claim 13 further defines over the cited references.

With respect to dependent claim 24, it is respectfully submitted that Enniss teaches away from the use of a carbon black pigment, such that a requisite suggestion to combine Enniss with Oliver or Marks does not exist. In particular, Enniss discloses altering a gray-toned, dyed film using a separate pigment selected to satisfy the color deficiency in the dyed film layer. *Enniss ‘551 Patent*, col. 1, l. 33 – col. 2, l. 9. With this specific guidance in mind, a carbon black pigment would not address the “color deficiency” of a gray-toned dyed film. As a result, because the proposed modification would render Enniss unsatisfactory for its intended purpose, Enniss teaches away from the limitations of claim 24 such that *prima facie* obviousness has not been established.

Independent claim 14 recites a pigmented optical body including a pigmented polymer material to which a dye is added to adjust the color by no more than 15 units of  $a^*$  and by no more than 15 units of  $b^*$ . Enniss does not teach or suggest at least these limitations. In particular, and as described above, Enniss starts with a dyed film, not a pigmented polymer. Thus, nothing in Enniss teaches or suggests adding a dye to a pigmented polymer in an amount effective to adjust the color of the resultant optical body by no more than 15 units of  $a^*$  and no more than 15 units of  $b^*$ . Along these same lines, because Enniss is essentially limited to adding a pigmented adhesive onto a dyed film, nothing in Enniss teaches or suggests a polymer material having dispersed therein a particulate pigment in an amount effective to produce a tint as otherwise recited in claim 14. The dyed base film of Enniss (prior to application of the pigmented adhesive) is gray-toned or tinted; thus, the added pigmented does not produce a tint, rather the dye provides this effect. For at least these reasons, then, it is respectfully submitted that claim 14 is allowable over the cited art.

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Claims 15-19, 21, and 23 depend from claim 14, and thus are also allowable for at least the above reasons. In addition, it is noted that claim 16 recites that the optical body has an  $a^*$  value and a  $b^*$  value in the range of  $-1.5 \pm 1$ . It is respectfully submitted that nothing in Enniss teaches or suggests this limitation. In fact, the only disclosures in Enniss to  $a^*$  and  $b^*$  values is in Example 1, whereby the resultant coated film exhibited an  $a^*$  value of -3.96 and a  $b^*$  value of -4.9, both of which are outside of the claimed range. Thus, it is respectfully submitted that claim 16 recites additionally allowable subject matter.

Independent claims 26 and 27 are also allowable over the cited art for at least the reasons provided above with respect to claims 1 and 14. In addition, claims 26 and 27 recite a carbon black particulate pigment. As described above, Enniss teaches away from the use of a carbon black pigment, such that claims 26 and 27 are further distinguished over the cited art. Along these same lines, claims 26 and 27 recite that the carbon black particulate pigment is dispersed within the polymer material at between 0.02 and 0.5 percent by weight. Nothing in Enniss teaches or suggests this limitation. In fact, Examples 1 and 2 of Enniss describe use of a pigment at 1 weight percent. Further, Enniss does not teach an oriented polymer having carbon black particulate pigment dispersed therein. For at least these reasons, then, it is respectfully submitted that claims 26 and 27 recite allowable subject matter over the cited references.

### **CONCLUSION**

In view of the above, Applicant respectfully submits that pending claims 1, 2, 10, 11, 13-19, and 21-27 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1, 2, 10, 11, 13-19, and 21-27 are respectfully requested.

No fees are required under 37 C.F.R. 1.16(b)(c). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 50-0471.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

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Any inquiry regarding this Response should be directed to David B. Patchett at Telephone No. (651) 736-4713, Facsimile No. (651) 736-3833, or Timothy A. Czaja at Telephone No. (612) 573-2004, Facsimile No. (612) 573-2005. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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By their attorneys,

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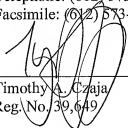
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